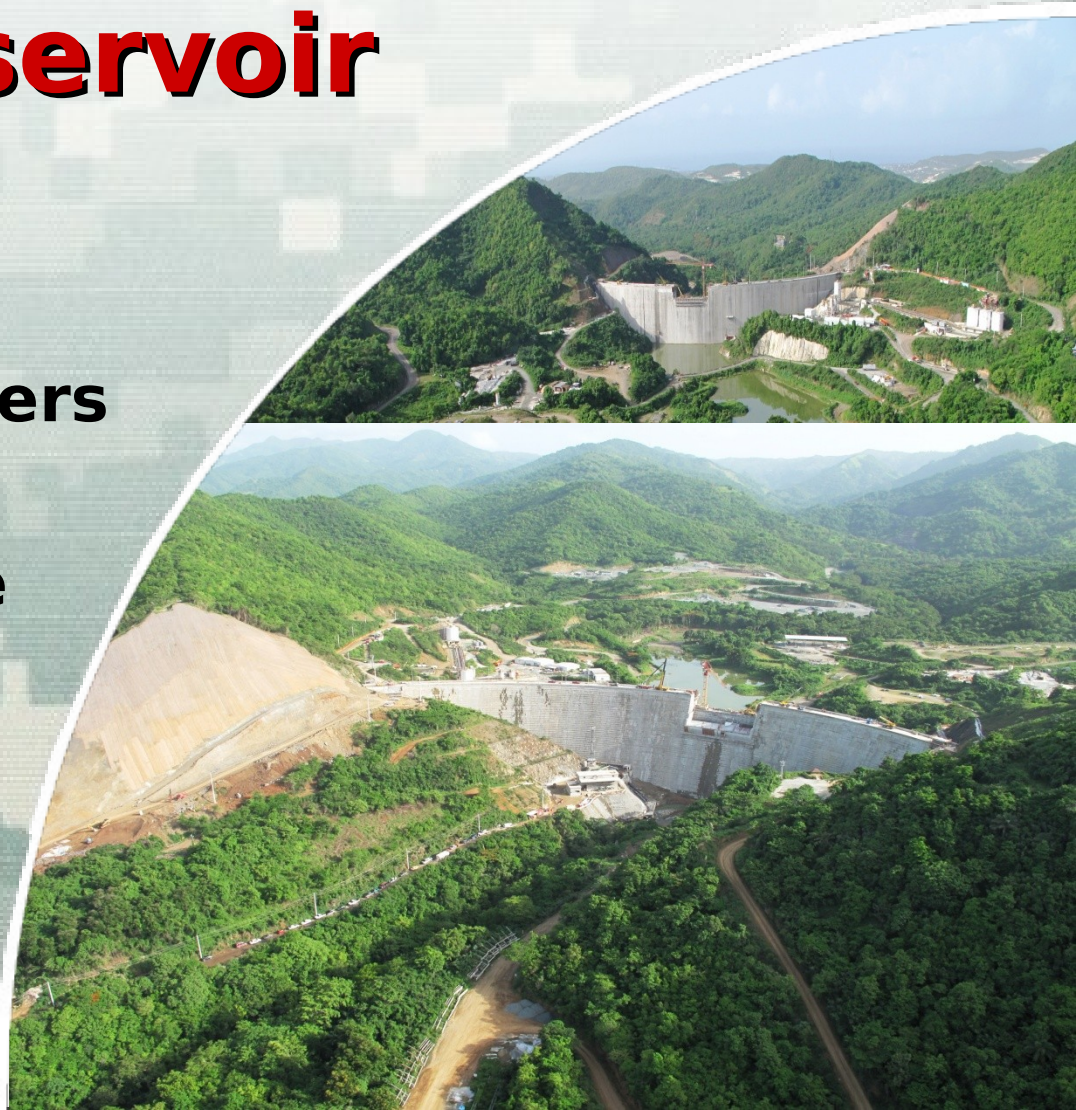
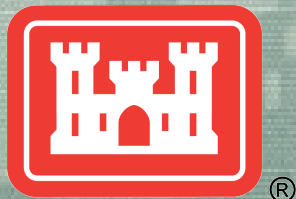


Operational Guidance/Water Control Plan for Portugués Dam and Reservoir

**Jacksonville District
Presentation to**

**Residents, Stakeholders
and the Autonomous
Municipality of Ponce**

July 9, 2013



Topics

- **Background**
- **Project Timeline**
- **Project Purposes**
- **Overview of Operational Guidance/Water Control Plan**
 - **Portugués Dam Operational Criteria**
 - **Portugués Dam Storage and Principal Elevations**
 - **Decision-Making Process**
 - **Deviation from Normal Regulation**
 - **Roles and Responsibilities**



Background

- **“City of Ponce is subject to extensive damage from flooding when either or both rivers overflow (i.e. Portugués and Bucaná Rivers)” - EA dated 22 Oct 1970**
- **“Within the municipality of Ponce, 500 people died, mostly from drowning. Streets were flooded, waterfront businesses were destroyed, and several government buildings were damaged. Telephone, telegraph, and electrical services were completely lost. Ponce was described as an image of "horrible desolation" by its municipal council.” Hurricane San**



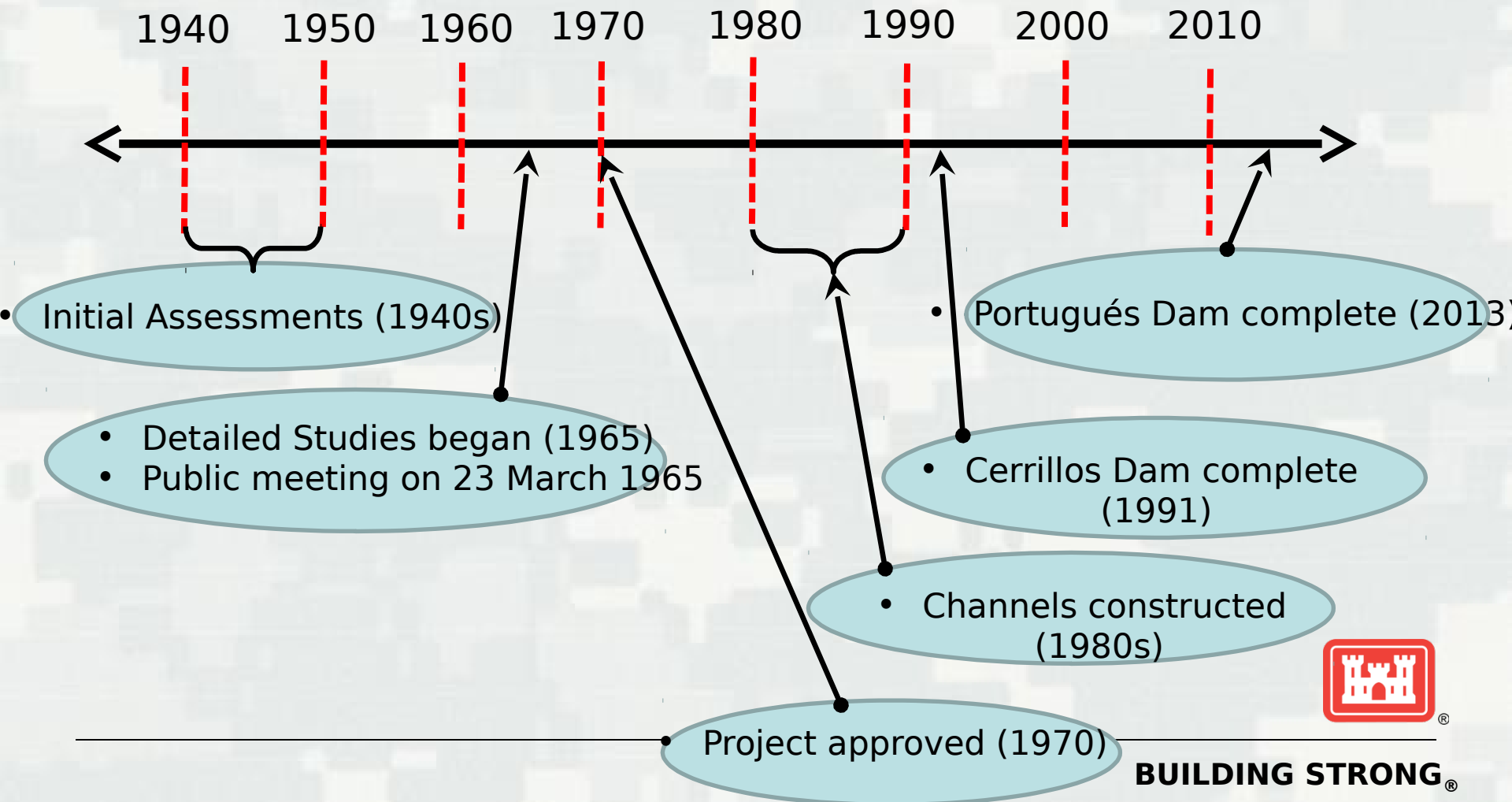
Ciriaco of 1899 - Wikipedia

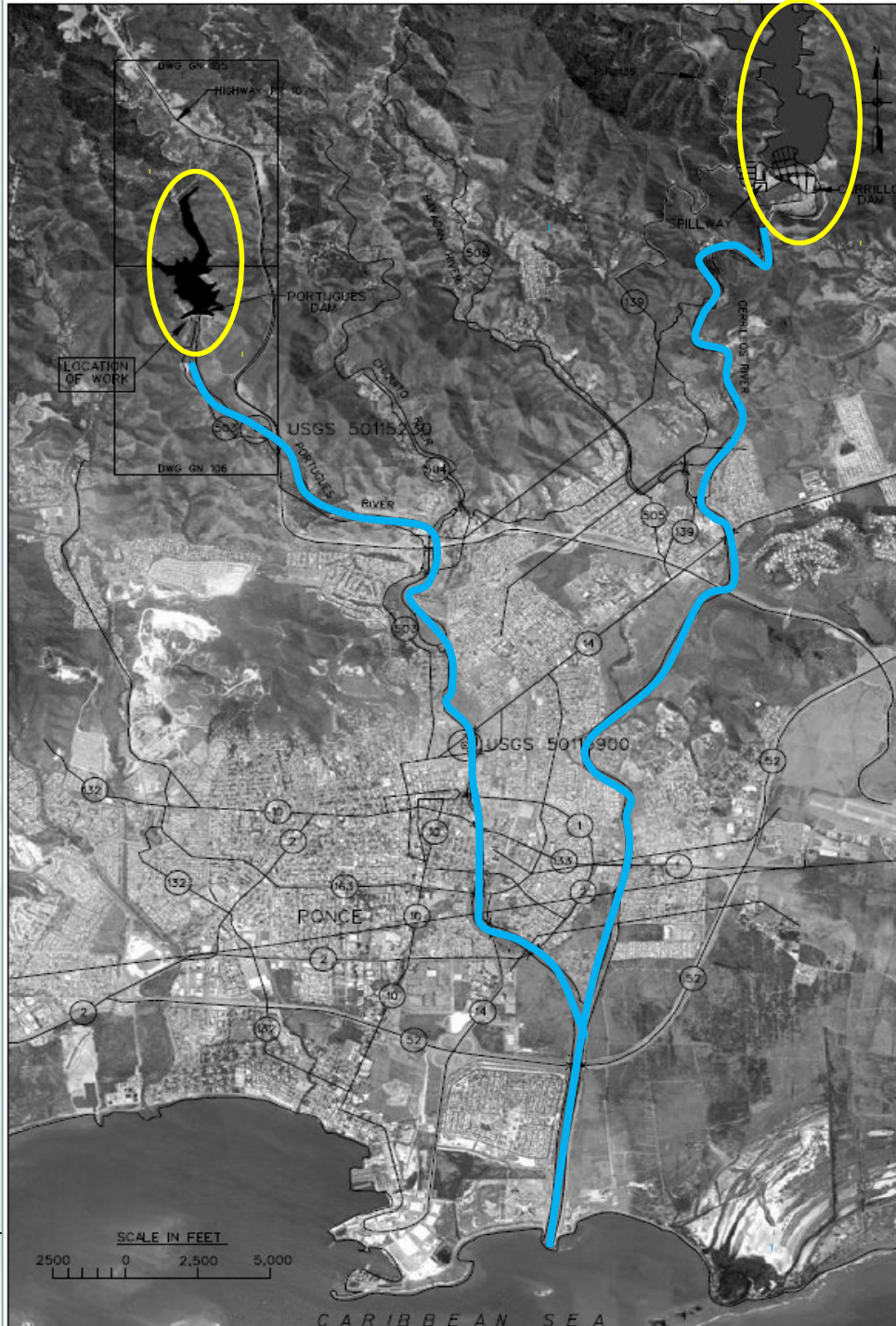
Project History

- Ponce subject to significant seasonal flooding due to hurricanes and rainfall
- Initial assessments began in the 1940s
- Detailed studies began in 1965
- Public hearing on 23 Mar 1965
- Plan: Two multiple-purpose reservoirs and associated channels



Project Timeline





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Project Purposes

- **Portugués and Bucaná Rivers Project, authorized in 1970, included 2 dams and channelization of both rivers for:**
 - **Flood Control**
 - **Water supply**
 - **Recreation**
 - **Fish and wildlife enhancement**



Project Purposes

1970 Authorization

- Flood Control
- Water supply
- Recreation
- Fish and wildlife enhancement

2013 Construction

- Flood Control



Overview of Operational Guidance/Water Control Plan

- **The purpose of an Operational Guidance/Water Control Plan is to assist project personnel in the day-to-day operation of a water resource. This includes:**
 - **Reservoir Storage Allocation**
 - **Water Management Operations**
 - **Deviations from Normal Regulation**
- **Additionally, this Plan resides within a Water Control Manual, which serves as a source for reference containing other information pertinent to the project.**

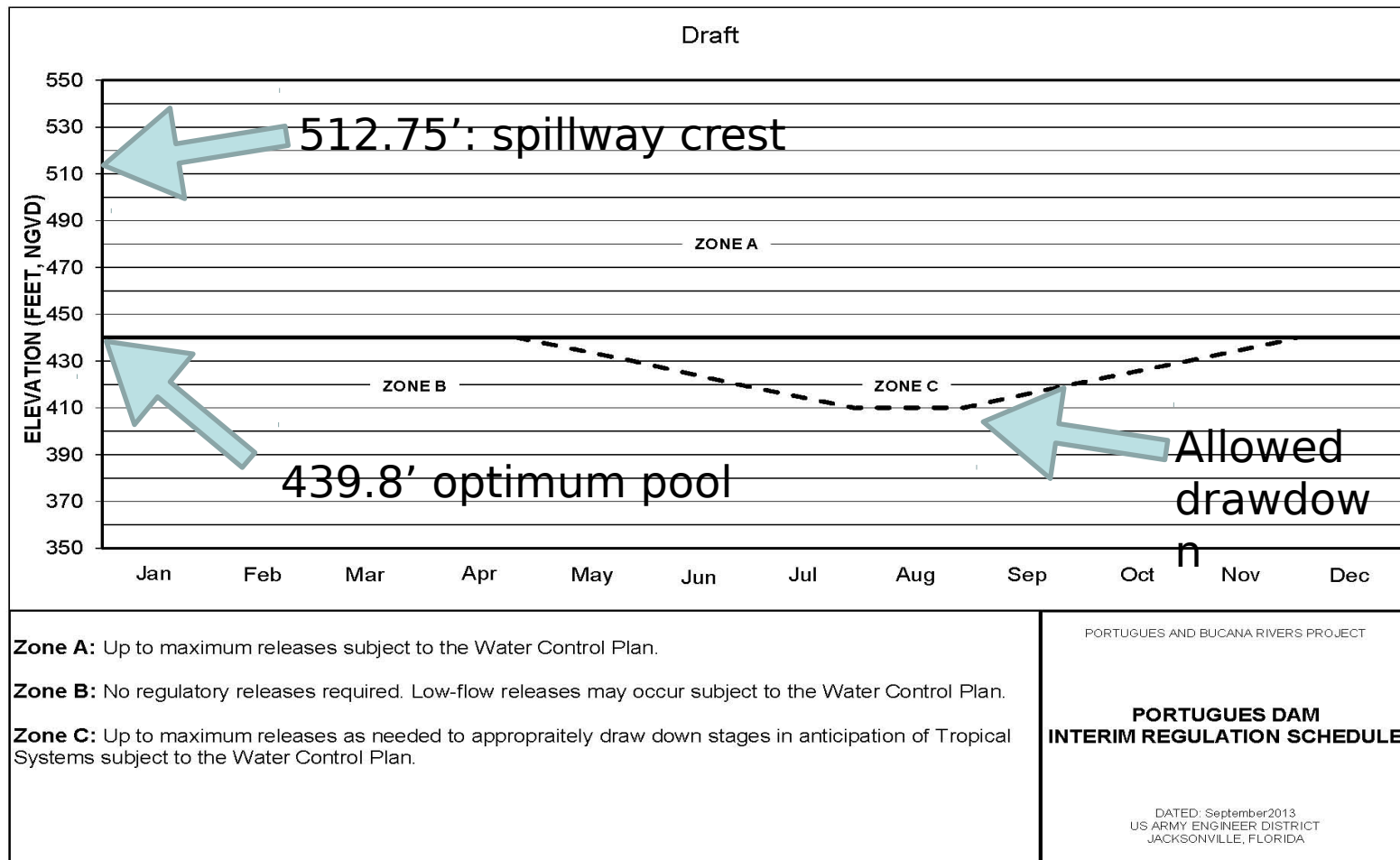


Portugués Dam Operational Criteria

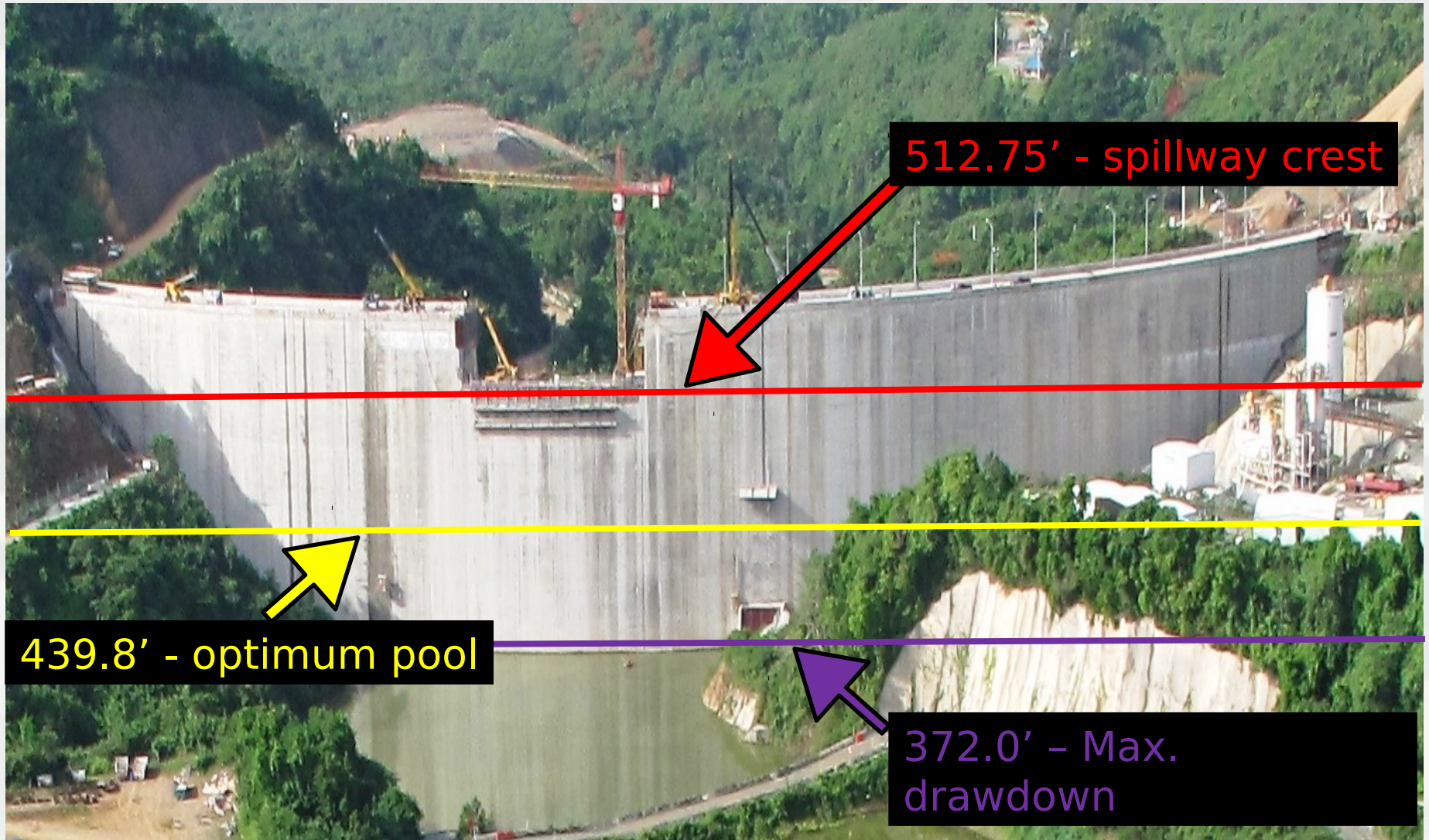
- **If the Reservoir elevation is at or below 439.8 feet, MSL, no flood control releases are required.**
 - **However, releases may be made for environmental water supply downstream or in anticipation of a storm/significant rainfall event.**
- **If the Reservoir elevation is above 439.8 and at or below 512.75 feet, MSL, flood control releases will typically occur.**
- **If the Reservoir elevation is above 512.75 feet, MSL, flood control releases will occur via the emergency spillway.**



Portugués Dam Storage and Principal Elevations



Portugués Dam Storage and Principal Elevations



Decision-Making Process

- **The decision-making process to determine quantity, timing, and duration of the potential releases from Portugués Reservoir includes consideration of various information. This information includes but is not limited to:**
- P&B watershed conditions
 - Current climate conditions
 - Historical Portugués Reservoir water levels (TBD)
 - Projected Portugués Reservoir water level rise/recession
 - Reservoir ecological condition/needs
 - Downstream ecological conditions/needs
 - Storage capacity
 - Climatic forecasts
 - Environmental Water supply conditions/needs
 - Hydrologic outlooks



Portugués Dam Deviation from Normal Regulation

- **Any deviation from the normal flood control procedures outlined in the Portugués Dam Water Control Manual shall be approved in advanced, except in the case of emergencies or unplanned minor construction deviations, by the USACE.**
- **Typically, DNER will be responsible for making deviation requests to the USACE - Jacksonville District.**



Roles and Responsibilities (Portugués & Bucaná Rivers Project)

➤ DNER (Local Sponsor):

- Operate and maintain the project in accordance with regulations prescribed by the Secretary of the Army and the Water Control Plan.

9-01. Responsibilities and Organization.

a. Department of Natural and Environmental Resources (DNER). As the local sponsor of the project, DNER has responsibility of operating and maintaining the project works in accordance with the regulations prescribed by the Secretary of the Army and the approved water control plan. These regulations are contained in section 208.10 and 208.11, Title 33 of the Code of Federal Regulations. A copy of these regulations is found in Exhibit D of this manual. These regulations are supplemented by approved water control plans and manuals. Day-to-day operations of the project will be performed by DNER staff located at the Cerrillos project.

b. Corps of Engineers. The Corps of Engineers could serve in an advisory capacity to the DNER on the operation and regulation of the reservoirs and water management. All contact relating to project operations and water control decisions should be with the Chief, Water Management and Meteorology Section, Hydrology and Hydraulic Branch, Engineering Division. A list of Corps of Engineers key water control personnel are found in Table 9-1. The role of the Corps is to provide and ensure that the DNER follows these regulations and that the project is operated to meet the prescribed project purposes.

➤ USACE (Regulatory Agency):

- Provide and ensure that DNER follows these regulations and that the project is operated to



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Thank You

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Portugués Dam and Reservoir Water Management

